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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,655	12/08/2003	Michael A. Friedman	MSFT-2939/167451.02	2975

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EXAMINER

TERMANINI, SAMIR

ART UNIT

PAPER NUMBER

2178

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/24/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/730,655	<b>Applicant(s)</b> FRIEDMAN ET AL.	
	<b>Examiner</b> Samir Termanini	<b>Art Unit</b> 2178	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/8/2003</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### BACKGROUND

1. This action is responsive to the following communications: Application filed on 12/8/2003.
2. Claims 1-14 are pending in this case. Claim 1 is in independent form.
3. The information disclosure statement (IDS) filed on 12/8/2003, has been acknowledged and considered by the examiner. The Initial copy of form PTO-1449 is included in this office action.

### CLAIM REJECTIONS - 35 U.S.C. §101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
5. Claims 1- 14 are rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter and further raises questions as to whether the claims are directed to an abstract idea.

With regard to claims 1-14, data structures not claimed as embodied in computer-readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory). The claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 U.S.C. §101. They are clearly not a series of steps or acts, to be a

Art Unit: 2178

process, nor are they a combination of chemical compounds to be a composition of matter. Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.

In the interest of advancing prosecution of this Application, the claims are being examined as if they were instead directed to a claimed computer-readable medium encoded with data structures defining structural and functional interrelationships between the data structures and the computer software and hardware components which permit the data structures' functionality to be realized. Therefore, claims 1-14, being directed toward non-functional descriptive material per se, fail to fall within a statutory category.

CLAIM REJECTIONS - 35 U.S.C. §102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-14 rejected under 35 U.S.C. 102(e) as being anticipated by

*Humpleman et al.* (US Pat. No. 6,546,419).

As to independent claim 1, *Humpleman et al.* teach a data structure formatted according to extensible markup language (XML) ("The comprehensive definition or data base utilizing XML" col. , lines 40-42) including data representative of a canonical UI description (INTERFACE-A.XML "the application interface description," col. 14, lines 50-55) of a device to be controlled for use by a universal console ("The document INTERFACE-A.XML describes the objects and methods supported by the Service A according to the document type definition INTERFACE.DTD for Service A." col. 12, lines 45-55).

As to dependent claims 2 and 3, *Humpleman et al.* teach a data structure according to claim 1, wherein said UI description includes a representation associated with a parameter for selecting ("selection information on the user interface" col. 3, lines 10-15) a subset of a set ("to include selection information for the second home device if at least a portion of the first and second capabilities data match" col. , lines 10-15).

As to dependent claim 3, *Humpleman et al.* further teach a parameter for selecting from a set ("parameters" col. , lines 5-10; see also code in col. 19).

As to dependent claim 4, *Humpleman et al.* further teach that the UI description includes a representation associated with a parameter for Off/On (e.g. "to turn...system off" col. 22, lines 40-50)

As to dependent claim 5, *Humpleman et al.* further teach a parameter for selecting an integer n in a range (e.g. "parameter value="4>channel</parameter>"" col. 19, lines 15-35).

As to dependent claim 6, *Humpleman et al.* further teach A data structure according to claim 1, wherein said UI description includes a representation associated with a

Art Unit: 2178

parameter for selecting a real number ("`<parameter value="19990401T19:05:35">startTime</parameter>`" col. 19, lines 25-38).

As to dependent claim 7, *Humpleman et al.* further teach that the description includes a representation associated with a parameter type for an arbitrary string (e.g. "`<name>startTime</name>`" col. 19, lines 1-5).

As to dependent claim 8, *Humpleman et al.* further teach that the arbitrary string *s* is to be selected from a suggestion set ("session manager 36 disables the selection icons Serv3 and Serv 4 for server devices SERVER3 and SERVER4, respectively. The user can then click on the icon Sew2 to command and control the server device SERVER2." col. 8, lines 55-65).

As to dependent claim 9, *Humpleman et al.* further teach that the description includes a representation associated with a parameter type for the modification of a given first string *s*, resulting in a second string *s'* ("A group of such message items are assembled to create a complete [second] command string." col. 11, lines 10-15).

As to dependent claim 10, *Humpleman et al.* further teach that the description includes a representation associated with a parameter type for ordering the elements of set *A* into *A'* ("Appendix 4 shows examples for changing from CAL command language to XML RPC format." col. 24, lines 60-63).

As to dependent claim 11, *Humpleman et al.* further teach that the UI description includes a representation associated with a parameter type for pairing set *A* elements with set *B* elements ("if at least a portion of the first and second capabilities data match, whereby the first and second home devices are compatible... And, the structured format can include the XML format " col. 3, lines 10-18).

As to dependent claim 12, *Humpleman et al.* further teach that the description includes a representation associated with a group construct that contains at least one of commands and subgroups ("For example, the subset can be selected to provide global or restricted use of all available services on a home network." col. , lines 28-30).

As to dependent claim 13, *Humpleman et al.* further teach that the UI description includes a representation associated with a command construct that specifies at least one action to send to the controlled element that will carry out the action-command (e.g. "<object> DVCRL.record </object> <method> oneTouchRecod </method> " col. 19, lines 25-38).

As to dependent claim 14, *Humpleman et al.* further teach that the UI description includes a description of the parameters associated with the at least one action (e.g. "value="19990401T19:05: 35"> startTime </ parameter> <parameter value="2:00:00"> recordTime </ parameter>"col. 19, lines 25-38).

### CONCLUSION

8. Although not relied upon, the following prior art is made of record because it considered pertinent to applicant's disclosure:

- [1] Hoffberg; Steven M. et al. (US 6,400,996 B1) for teaching a adaptive interface for a programmable system.
- [2] Boghe et al. (WO 2002/31978 A) for teaching a Method of providing, in a mark-up language format, data representative of a control code for installation on a control device comprises: enabling a user to specify to a server on the network an apparatus for being controlled by the control device; and enabling the server to identify a corresponding control code for being provided as the data in the mark-up language format.
- [3] Lim; Hoon Chiat et al. (US 6,374,296 B1) for teaching a cross-platform network and a remote computer operatively linked.

- [4] Lim; Hoon Chiat et al. (US 6,370,582 B1) for teaching a a facility access controller.
- [5] Harris, Glen McLean et al. (US 2001/0033243 A1) for teaching an online remote control configuration system for efficiently programming a remote control to recognize a plurality of external electronic devices.
- [6] Mitani (US 6,466,233 B1) for teaching a detecting unit for detecting user operations corresponding to the graphical user interfaces displayed on a remote control.
- [7] *Humpleman et al.* (US 6,182,094 B1) for teaching a second home device, which is browser based, which may be connected to a home network to receive the HTML page and to render the HTML page, for display to a user.
- [8] *Humpleman et al.* (US 6,198,479 B1) for teaching commanding and controlling diverse home devices on a home network to perform a service.
- [9] *Humpleman et al.* (US 6,243,707 B1) for teaching commanding and controlling diverse home devices according to sequences of commands stored as a macro to control the home device. A sequence of commands, used to control a plurality of home devices in tandem, is stored as a macro. The invention provides the user a capability of operating a single button to implement a sequence of control commands from within a HTML page contained on the respective home devices being controlled.
- [10] *Humpleman et al.* (US 6,288,716 B1) for teaching a control and command information sent from a first home device to the second home device in order to control the second device according to the user input.
- [11] Yang (US 6,133,847 A) for teaching a remote control device that is able to be programmed after initial manufacture to accommodate the control of additional apparatuses.

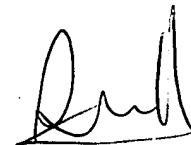
9. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Samir Termanini whose telephone number is (571) 270-1047. The Examiner can normally be reached from 9 A.M. to 4 P.M., Monday through Friday (excluding alternating Fridays).



Art Unit: 2178

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Stephen S. Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, *see* <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



STEPHEN HONG  
SUPERVISORY PATENT EXAMINER

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Samir Termanini  
Patent Examiner  
Art Unit 2178